

In the Claims:

Please add new claims 31-36, and amend the pending claims as follows:

Claim 3, line 2, delete "or 2".

1                   Claim 8     (Amended) A method for the formation of an embedded  
2                    electroconductive layer, comprising the steps of:  
3                    forming an opening part or a depressed part in an insulating layer;  
4                    forming a barrier layer for covering one of said opening part [or] and said  
5                    depressed part, said barrier layer being formed of a material selected from the group  
6                   consisting of TiSiN, WN, TaN, TiN, and Al<sub>2</sub>O<sub>3</sub>;  
7                    forming on said barrier layer a growth promoting [TiN] layer containing  
8                    oxygen at a lower concentration than said barrier layer;  
9                    depositing [aCu] an electroconductive layer on and in contact with said growth  
10                   promoting [TiN] layer by the use of a chemical vapor [growth] deposition method and  
11                   embedding said electroconductive [Cu]layer in one of said opening part [or] and said  
12                   depressed part; and  
13                   removing the unwanted parts of said barrier layer, said growth promoting  
14                   [TiN] layer [of a low oxygen concentration], and said electroconductive [Cu] layer [by  
15                   chemical mechanical polishing].

Claim 10, line 1, delete "9" and insert --8--.

Claim 12, line 2 delete "Ti" and insert --TiN--.

1                   Claim 15 (Amended) The method according to claim 8, wherein said  
2                   growth promoting [TiN] layer containing oxygen at a lower concentration than said barrier  
3                   layer is deposited by a chemical vapor [growth] deposition method.

3  
1                   Claim 16 (Amended) The method according to claim 8, wherein said  
2                   growth promoting [TiN] layer containing oxygen at a lower concentration than said barrier  
3                   layer is deposited by a collimation sputtering method or long throw sputtering method  
4                   interposing an interval of not less than 10 cm between a target and a substrate under  
5                   treatment.

--Claim 31 (New) The method according to claim 8, wherein said step of  
removing the unwanted parts is conducted using a chemical mechanical polishing method.

1                   Claim 32 (New) The method according to claim 8, wherein said growth  
2                   promoting layer is made of TiN.

1                   Claim 33 (New) The method according to claim 8, wherein said  
2                   electroconductive layer is made of a material selected from the group of Cu, Al and Al alloy.

1                   Claim 34 (New) A method for the formation of an embedded  
2                   electroconductive layer, comprising the steps of:

3                   forming an opening part or a depressed part in an insulating layer;

4                   forming a barrier layer for covering said opening part or said depressed part

5                   by the use of a physical vapor deposition method;

6                   forming on said barrier layer a growth promoting layer by the use of a chemical  
7                   vapor deposition method;

8                   depositing said electroconductive layer on said growth promoting layer to  
9                   embed said electroconductive layer in said opening part or said depressed part; and

10                  removing the unwanted parts of said barrier layer, said growth promoting layer  
11                  of a lower oxygen concentration, and aid electroconductive layer.

35  
1                   Claim 34 (New) A method for the formation of an embedded  
2                   electroconductive layer, comprising the steps of:

3                   forming an opening part or a depressed part in an insulating layer;

4                   forming a barrier layer for covering said opening part or said depressed part

5                   by the use of a physical vapor deposition method, said barrier layer being formed of a  
6                   material selected from the group consisting of TiSiN, WN, TaN, TiN, and Al<sub>2</sub>O<sub>3</sub>;

7 forming on said barrier layer a growth promoting layer by the use of a chemical  
8 vapor deposition method;

9 depositing said electroconductive layer on said growth promoting layer to  
10 embed said electroconductive layer in said opening part or said depressed part; and

11 removing the unwanted parts of said barrier layer, said growth promoting layer  
12 of a lower oxygen concentration, and said electroconductive layer.

1 Claim <sup>36</sup> ~~35~~ (New) A method for the formation of an embedded  
2 electroconductive layer, comprising the steps of:

3 forming at least one of an opening part and a depressed part in an insulating  
4 layer;

5 forming a barrier layer for covering said at least one opening part and  
6 depressed part, said barrier layer being formed of a material selected from the group  
7 consisting of TiSiN, WN, TaN, TiN, and Al<sub>2</sub>O<sub>3</sub>;

8 forming on said barrier layer a growth promoting layer containing oxygen at  
9 a lower concentration than said barrier layer;

10 depositing said electroconductive layer on and in contact with said growth  
11 promoting layer and embedding said electroconductive layer in said at least one opening part  
12 and depressed part; and

13 removing the unwanted parts of ~~said barrier layer, said growth promoting layer~~  
14 of a lower oxygen concentration, and said ~~electroconductive layer.~~

37  
1 Claim 36 (New) A method for the formation of an embedded  
2 electroconductive layer, comprising the steps of:

3 forming at least one of an opening part and a depressed part in an insulating  
4 layer;

5 forming a barrier layer against Cu for covering said at least one opening part  
and depressed part;

6 forming on said barrier layer a growth promoting layer containing oxygen at  
7 a lower concentration than said barrier layer;

8 depositing Cu film as an electroconductive layer on and in contact with said  
9 growth promoting layer and embedding said electroconductive layer in said at least one  
10 opening part and depressed part; and

11 removing the unwanted parts of said barrier layer, said growth promoting layer  
12 of a lower oxygen concentration, and said electroconductive layer. --